



US006921990B1

(12) **United States Patent**
Higgins

(10) **Patent No.:** **US 6,921,990 B1**

(45) **Date of Patent:** **Jul. 26, 2005**

(54) **ELECTRONIC STATUS MONITORING
SYSTEM FOR SECURITY CONTAINERS**

(75) Inventor: **Robert C. Higgins**, Tiverton, RI (US)

(73) Assignee: **The United States of America as
represented by the Secretary of the
Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 88 days.

(21) Appl. No.: **10/624,171**

(22) Filed: **Jul. 21, 2003**

(51) Int. Cl.⁷ **G08B 13/00**; G08B 23/00;
H01H 9/00; E05C 9/00; H01R 13/44

(52) U.S. Cl. **307/328**; 109/38; 312/216;
340/500; 340/652; 340/687; 439/133

(58) Field of Search 200/42.01–43.22,
200/52 R, 334; 335/205; 439/133, 439;
307/326–328; 109/35–44; 340/500, 652,
653, 686.1, 687; 312/216–221, 352

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,105,885 A * 8/1978 Orenstein 200/52 R
4,317,969 A * 3/1982 Riegler et al. 335/205 X
4,598,964 A * 7/1986 Frink et al. 439/133

* cited by examiner

Primary Examiner—James R. Scott

(74) *Attorney, Agent, or Firm*—Michael F. Oglo; James M.
Kasischke; Jean-Paul Nasser

(57) **ABSTRACT**

An electronic monitoring system is disclosed for detecting the open and closed conditions of containers or cabinets containing confidential or classified information. The electronic monitoring system includes a current sensor that detects the presence of a locking bar secured to the containers. A current sensor located on each cabinet operatively cooperates with the transmitter that transmits a signal to a central location, which provides an indicator of the secured or non-secured condition of the container.

20 Claims, 5 Drawing Sheets

